WHAT IS CLAIMED IS:

1. A sorting apparatus that sorts out a collected object unit for recycle, where the object unit is included in a predetermined device and has a storage element, which stores information regarding the object unit and sends the stored information on an electromagnetic wave in a predetermined frequency band, in response to reception of a specific electromagnetic wave in the predetermined frequency band, said sorting apparatus comprising:

an electromagnetic wave transmission module that sends the specific electromagnetic wave in the predetermined frequency band to a preset coverage area;

an information reception module that receives the information regarding the object unit, which is carried on the electromagnetic wave in the predetermined frequency band and is sent from the storage element of the collected object unit entering the preset coverage area, in response to transmission of the specific electromagnetic wave in the predetermined frequency band; and

a sorting module that sorts out the object unit for recycle, based on the received information regarding the object unit.

2. A sorting apparatus in accordance with claim 1,

wherein the predetermined device is an image formation device that forms an image on a medium like paper, and

the object unit is any one of a recording material cartridge, a photoreceptor unit, a transfer unit, and a fixation unit.

3. A sorting apparatus in accordance with claim 1, wherein said sorting module comprises a recyclability specification module that specifies recyclability of the object unit, based on the received information regarding the object unit,

said sorting module sorting out the object unit according to the specified recyclability.

4. A sorting apparatus in accordance with claim 3, wherein the information regarding the object unit includes a record on a number of recycles of the object unit, and

said recyclability specification module determines that the object unit is recyclable when the number of recycles is not greater than a preset number of times.

5. A sorting apparatus in accordance with claim 3, wherein the information regarding the object unit includes a record on a number of recycles of a component included in the object unit, and

said recyclability specification module determines that

the object unit is recyclable when the number of recycles is not greater than a preset number of times.

6. A sorting apparatus in accordance with claim 3, wherein the object unit is a recording material cartridge of an image formation device,

the information regarding the object unit includes information on a residual amount of a recording material, and

said recyclability specification module determines that the object unit is recyclable when the residual amount of the recording material is not less than a preset level.

7. A sorting apparatus in accordance with claim 3, wherein said sorting module, when said recyclability specification module determines that the object unit is recyclable, specifies a recycling-related operation based on the received information regarding the object unit and sorts out the object unit corresponding to the specified recycling-related operation.

8. A sorting apparatus in accordance with claim 1, said sorting apparatus further comprising:

an information storage module that stores the information received by said information reception module and information regarding a result of sorting by said sorting module; and

a support information output module that outputs support information for a recycling-related operation, based on the information stored in said information storage module.

9. A sorting apparatus in accordance with claim 1, said sorting apparatus further comprising:

a sorting unit control module that controls a sorting unit, which actually sorts out the object unit according to a result of sorting of the object unit by said sorting module.

10. An operation verification apparatus that verifies a recycling-related operation of an object unit, which is included in a predetermined device and is sorted out for recycle by a sorting apparatus, said operation verification apparatus comprising:

an information acquisition module that acquires information regarding the object unit after the recycling-related operation from a storage element of the object unit; and

a verification module that verifies the recycling-related operation, based on a result of comparison between the acquired information and information on sorting of the object unit stored in an information storage module of said sorting apparatus.

11. An operation verification apparatus in accordance

with claim 10, wherein the sorting apparatus sorts out a collected object unit for recycle, where the object unit is included in a predetermined device and has a storage element, which stores information regarding the object unit and sends the stored information on an electromagnetic wave in a predetermined frequency band, in response to reception of a specific electromagnetic wave in the predetermined frequency band,

the sorting apparatus comprising: an electromagnetic wave transmission module that sends the specific electromagnetic wave in the predetermined frequency band to a preset coverage area; an information reception module that receives the information regarding the object unit, which is carried on the electromagnetic wave in the predetermined frequency band and is sent from the storage element of the collected object unit entering the preset coverage area, in response to transmission of the specific electromagnetic wave in the predetermined frequency band; and a sorting module that sorts out the object unit for recycle, based on the received information regarding the object unit.

12. A sorting method that sorts out a collected object unit for recycle, where the object unit is included in a predetermined device and has a storage element, which stores

information regarding the object unit and sends the stored information on an electromagnetic wave in a predetermined frequency band, in response to reception of a specific electromagnetic wave in the predetermined frequency band, said sorting method comprising the steps of:

(a) sending the specific electromagnetic wave in the predetermined frequency band to a preset coverage area;

(b) receiving the information regarding the object unit, which is carried on the electromagnetic wave in the predetermined frequency band and is sent from the storage element of the collected object unit entering the preset coverage area, in response to transmission of the specific electromagnetic wave in the predetermined frequency band; and

(c) sorting out the object unit for recycle, based on the received information regarding the object unit.

13. A sorting method in accordance with claim 12, wherein said step (c) comprises the step (c1) that specifies recyclability of the object unit, based on the received information regarding the object unit, and the step (c2) that sorts out the object unit according to the specified recyclability.

14. A sorting method in accordance with claim 13, wherein the information regarding the object unit includes a record

on a number of recycles of at least one of components included in the object unit, and

said step (c1) determines that the object unit is recyclable when the number of recycles is not greater than a preset number of times.

15. A sorting method in accordance with claim 13, wherein the object unit is a recording material cartridge of an image formation device,

the information regarding the object unit includes information on a residual amount of a recording material, and

said step (c1) determines that the object unit is recyclable when the residual amount of the recording material is not less than a preset level.

16. A sorting method in accordance with claim 13, wherein said step (c2), when said step (c1) determines that the object unit is recyclable, specifies a recycling-related operation based on the received information regarding the object unit and sorts out the object unit corresponding to the specified recycling-related operation.

17. A sorting method in accordance with claim 12, said sorting method further comprising the step of controlling a sorting unit, which actually sorts out the object unit according to a result of sorting of the object unit by said

step (c).